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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,191	02/15/2002	Jordan T. Bourilkov	08935-258001 / M-4980	9513
26161	7590	05/26/2005	EXAMINER	
FISH & RICHARDSON PC			PATEL, RAJNIKANT B	
225 FRANKLIN ST			ART UNIT	
BOSTON, MA 02110			PAPER NUMBER	

2838

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,191

Applicant(s)

BOURILKOV ET AL.

Examiner

Rajnikant B. Patel

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,11,14-17 and 19-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,11,14-17 and 19-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 10-11, 14-17 and 19-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 15, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Saeki et al. (U.S. Patent # 5,610,450)

Saeki et al. disclose the claimed invention a power supply (figure 1), including a primary cell (figure 1, item 21), a rechargeable cell (figure 1, item 21), an Li-Ion cell (column 4, line 35-40), a fixed output (Abstract, line 10-15) and less than the full charge (column 5, line 55-65).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Patent # 5,986,437) in combination with Payne (U.S. patent # 5,309,082).

Lee discloses claimed invention a switching DC/DC boost type converter (figure 2 and 4-5), including a primary cell (figure 5, item 4), a rechargeable cell (figure 5, item 8), a control circuit (figure 5, item microcomputer), a feedback and charge control (column 3, line 65-67 and column 4, line 1- 50). However Lee does not disclose the utilization of the technique for a resistor voltage divider ratio at the feedback input and a hybrid power supply. Payne teaches the utilization of the similar technique for a resistor voltage divider ratio at the feedback input (column 2, line 35-50 and column 3, line 30-65) and a hybrid power supply (column 2, line 14-20). It would have been obvious one having an ordinary skill in the art at the time the invention made to modify Lee 's power supply by utilizing the technique taught by Payne for the purpose of increasing efficiency of the power supply.

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3. Claims 14,16-17,19-26 and 28-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki et al. (U.S. Patent # 5,986,437) in combination with Lee (U.S. patent # 5,986,437).

Saeki et al. disclose the claimed invention a boost type DC/DC converter (figure 1), a primary cell (figure 1, item 20) and secondary cell (figure 1, item 21 and column 4, line 35-40), a 90 % of charge (column 1, line 60-68). However Saeki et al. does not disclose the utilization of the technique for a circuit that senses primary battery current. It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Saeki et al.'s power supply by utilizing the technique taught by Lee for the purpose of providing protection to battery.


In regards to claims 20,29,32 Saeki et al. in combination with Lee disclose the utilization an operational amplifier with primary battery current sensing resistor (Lee's figure 5, item U161).

In regards to claims 24-26,30-31,Saeki et al. disclose the claimed invention except an alkaline cell, Zn-air cell or fuel cell. It would have been obvious one having ordinary skill in the art at the time the invention was made to utilize DC connector or AC adapter since examiner takes official notice of equivalence of an alkaline cell, Zn-air cell or fuel cell for their use in the art and the selection of these known equivalent to power supply would be within the level of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 571-272-2082. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rajnikant B Patel
Primary Examiner
Art Unit 2838
